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 **PALM INTRANET**

Inventor Information for 10/812732

Inventor Name	City	State/Country
CHU, RICHARD C.	HOPEWELL JUNCTION	NEW YORK
ELLSWORTH, MICHAEL J. JR.	LAGRANGEVILLE	NEW YORK
SCHMIDT, ROGER R.	POUGHKEEPSIE	NEW YORK
SIMONS, ROBERT E.	POUGHKEEPSIE	NEW YORK

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US 6164076 A	USPAT	20001226		Thermoelectric cooling assembly with thermal space transformer interposed between cascaded thermoelectric stages for improved thermal performance	62/3.7	62/259.2	Chu; Richard C. et al.
US 6144013 A	USPAT	20001107		Local humidity control system for low temperature electronic module	219/209	392/416	Chu; Richard C. et al.
US 6125036 A	USPAT	20000926		Moisture barrier seals for cooled IC chip module assemblies	361/700	165/80.4; 165/80.5; 174/15.1; 174/15.2; 257/714; 257/715; 257/E23.084; 257/E23.098; 361/699; 361/701; 361/705; 361/708; 361/719	Kang; Sukhvinder et al.
US 6122926 A	USPAT	20000926		Low thermal conductance insulated	62/259.2	257/E23.088; 62/272;	Kang; Sukhvinder et

				cooling assembly for IC chip modules		62/273	al.
US 6058010 A	USPAT	20000502		Enhanced test head liquid cooled cold plate	361/689	165/80.4; 174/15.1; 174/15.2; 361/699; 361/700; 361/704; 361/707; 361/719	Schmidt; Roger R. et al.
US 6035655 A	USPAT	20000314		Modular refrigeration system	62/259.2	62/196.4	Hare; Jeffrey J. et al.
US 6034872 A	USPAT	20000307		Cooling computer systems	361/699	165/165; 165/170; 361/735; 62/259.2	Chrysler; Gregory M. et al.
US 6023410 A	USPAT	20000208		Extended cooling for portable computers	361/681	361/687; 361/690; 361/707	Chu; Richard C. et al.
US 6018458 A	USPAT	20000125		Constant impedance air baffle for cooling of electronic card assemblies	361/690	165/80.3; 312/223.2; 361/687; 361/692; 361/695; 361/720	Delia; David J. et al.
US 5970731 A	USPAT	19991026		Modular refrigeration system	62/196.4	62/228.4	Hare; Jeffrey J. et al.
US 5963425 A	USPAT	19991005		Combined air and refrigeration cooling for computer systems	361/695	165/104.33; 165/80.4; 174/15.1; 361/699; 454/186; 62/259.2	Chrysler; Gregory M. et al.
US 5954127 A	USPAT	19990921		Cold plate for dual refrigeration system	165/170	165/164; 165/165; 361/700; 62/259.2	Chrysler; Gregory M. et al.
US 5953930 A	USPAT	19990921		Evaporator for use in an extended air cooling system for electronic components	62/259.2	165/104.21; 165/104.33; 257/E23.088; 361/700	Chu; Richard C. et al.
US 5934364 A	USPAT	19990810		Cold plate for dual refrigeration systems	165/170	165/164; 165/80.2	Chrysler; Gregory M.. et al.
US 5926368 A	USPAT	19990720		Enhanced air cooling system with attached cooling unit	361/695		Chrysler; Gregory Martin et al.
US 5896922 A	USPAT	19990427		Cold plate for dual refrigeration systems	165/165	165/146; 165/170; 62/259.2	Chrysler; Gregory M. et al.

US 5826643 A	USPAT	19981027		Method of cooling electronic devices using a tube in plate heat sink	165/80.4	165/146; 165/168; 257/E23.098; 361/699; 361/719	Galyon; George Tipton et al.
US 5825620 A	USPAT	19981020		Enhanced air cooling system with attached cooling unit	361/695		Chrysler; Gregory Martin et al.
US 5812372 A	USPAT	19980922		Tube in plate heat sink	361/699	165/80.4; 174/15.1; 257/714	Galyon; George Tipton et al.
US 5794454 A	USPAT	19980818		Cooling device for hard to access non-coplanar circuit chips	62/259.2	165/104.21; 165/104.33; 257/E23.088; 257/E23.103; 361/700	Harris; Willard Stephen et al.
US 5761037 A	USPAT	19980602		Orientation independent evaporator	361/700	165/104.26; 165/80.4; 257/E23.088; 62/259.2	Anderson; Timothy Merrill et al.
US 5758418 A	USPAT	19980602		Method of making an ultra high-density, high-performance heat sink	29/890.03	257/E23.105; 29/890.054	Chrysler; Gregory Martin et al.
US 5743794 A	USPAT	19980428		Method for field upgrading of air cooling capacity	454/184	361/695	Chrysler; Gregory Martin et al.
US 5719745 A	USPAT	19980217		Extended surface cooling for chip stack applications	361/704	174/16.3; 257/722; 257/E25.013; 361/710	Agonafer; Dereje et al.
US 5704419 A	USPAT	19980106		Air flow distribution in integrated circuit spot coolers	165/121	165/80.3; 257/E23.099; 361/697	Agonafer; Dereje et al.
US 5699853 A	USPAT	19971223		Combined heat sink and sink plate	165/104.21	165/104.33; 165/185; 257/E23.088; 361/700	Goth; Gary Franklin et al.
US 5615084 A	USPAT	19970325		Enhanced flow distributor for integrated circuit spot coolers	361/697	165/121; 165/80.3; 257/E23.099; 361/719; 415/178; 415/213.1	Anderson; Timothy M. et al.
US 5609202 A	USPAT	19970311		Enhanced flow distributor for integrated circuit spot coolers	165/80.3	165/122; 165/124; 165/126; 165/185; 165/96; 174/16.3;	Anderson; Timothy M. et al.

						257/722; 257/E23.099; 361/697	
US 5609201 A	USPAT	19970311		Enhanced flow distributor for integrated circuit spot coolers	165/80.3	165/122; 165/124; 165/126; 165/185; 165/96; 174/16.3; 257/722; 257/E23.099; 361/697	Anderson; Timothy M. et al.
US 5604665 A	USPAT	19970218		Multiple parallel impingement flow cooling with tuning	361/703	165/908; 257/722; 361/719	Chrysler; Gregory M. et al.
US 5482113 A	USPAT	19960109		Convertible heat exchanger for air or water cooling of electronic circuit components and the like	165/137	165/122; 165/157	Agonafer; Dereje et al.
US 5456081 A	USPAT	19951010		Thermoelectric cooling assembly with optimized fin structure for improved thermal performance and manufacturability	62/3.7	136/204; 165/185; 165/80.2; 257/E23.082; 62/259.2	Chrysler; Gregory M. et al.
US 5437328 A	USPAT	19950801		Multi-stage heat sink	165/146	165/185; 257/E23.099; 257/E23.103; 361/692	Simons; Robert E.
US 5412536 A	USPAT	19950502		Local condensation control for liquid impingement two-phase cooling	361/700	165/104.26; 165/80.5; 174/15.2; 257/715; 257/E23.088	Anderson; Timothy M. et al.
US 5394299 A	USPAT	19950228		Topology matched conduction cooling module	361/705	165/79; 165/80.4; 257/707; 257/719; 257/E23.094; 257/E23.1; 361/699; 361/719	Chu; Richard C. et al.
US 5370178 A	USPAT	19941206		Convertible cooling module for air or water cooling of electronic circuit components	165/137	165/185; 165/80.3; 165/80.4; 257/E23.098; 257/E23.099; 361/697;	Agonafer; Dereje et al.

						361/699; 361/703	
US 5335143 A	USPAT	19940802		Disk augmented heat transfer system	361/694	165/122; 257/706; 257/707; 361/784	Maling, Jr.; George C. et al.
US 5269372 A	USPAT	19931214		Intersecting flow network for a cold plate cooling system	165/80.4	165/185; 257/714; 257/E23.098; 361/699	Chu; Richard C. et al.
US 5228502 A	USPAT	19930720		Cooling by use of multiple parallel convective surfaces	165/80.4	165/142; 165/908; 257/714; 257/E23.093; 257/E23.094; 361/689	Chu; Richard C. et al.
US 5170319 A	USPAT	19921208		Enhanced multichip module cooling with thermally optimized pistons and closely coupled convective cooling channels	361/689	165/170; 165/80.3; 257/714; 257/E23.094; 257/E23.098; 361/699	Chao-Fan Chu; Richard et al.
US 5168348 A	USPAT	19921201		Impingment cooled compliant heat sink	257/713	257/714; 257/E23.093; 257/E23.094; 257/E23.102; 257/E23.103; 257/E23.105; 361/704	Chu; Richard C. et al.
US 5161089 A	USPAT	19921103		Enhanced multichip module cooling with thermally optimized pistons and closely coupled convective cooling channels, and methods of manufacturing the same	361/703	165/185; 165/80.4; 257/712; 257/E23.094; 257/E23.098; 361/699; 361/707	Chu; Richard C. et al.
US 5097385 A	USPAT	19920317		Super-position cooling	361/703	165/104.33; 165/80.4; 174/16.3; 257/E23.093; 257/E23.094; 257/E23.096; 361/699	Chao-Fan Chu; Richard et al.
US 4928207 A	USPAT	19900522		Circuit module with direct liquid cooling by a coolant flowing between a heat producing component	361/700	257/E23.088; 257/E23.093; 257/E23.094; 361/703	Chrysler; Gregory et al.

				and the face of a piston			
US 4765400 A	USPAT	19880823		Circuit module with pins conducting heat from floating plate contacting heat producing device	165/185	257/713; 257/714; 257/720; 257/722; 257/E23.094; 361/689	Chu; Richard C. et al.
US 4765397 A	USPAT	19880823		Immersion cooled circuit module with improved fins	165/104.33	165/146; 165/80.3; 165/80.4; 165/903; 257/E23.098; 361/699; 361/703	Chrysler; Gregory M. et al.
US 4757370 A	USPAT	19880712		Circuit package cooling technique with liquid film spreading downward across package surface without separation	257/715	257/E23.088	Agonafer; Dereje et al.
US 4709754 A	USPAT	19871201		Heat transfer element with nucleate boiling surface and bimetallic fin formed from element	165/133	165/80.4	Chu; Richard C. et al.
US 4638858 A	USPAT	19870127		Composite heat transfer device with pins having wings alternately oriented for up-down flow	165/185	165/181	Chu; Richard C.
US 4235494 A	USPAT	19801125		Data processor enclosure with tambour door	312/297	160/25	Chu; Richard C. et al.
US 4233644 A	USPAT	19801111		Dual-pull air cooling for a computer frame	361/687	174/16.3; 361/697	Hwang; Un-Pah et al.
US 4226281 A	USPAT	19801007		Thermal conduction module	165/80.2	165/185; 165/80.4; 257/697; 257/713; 257/714; 257/719; 257/E23.094; 257/E23.098; 361/715	Chu; Richard C.
US 4193445 A	USPAT	19800318		Conduction cooled module	165/79	165/185; 165/80.3; 165/80.4; 257/E23.094; 257/E23.098; 361/706	Chu; Richard C. et al.

US 4167771 A	USPAT	19790911		Thermal interface adapter for a conduction cooling module	361/715	165/185; 165/80.2; 174/16.3; 257/714; 257/718; 257/720; 257/E23.094; 257/E23.098; 257/E23.107; 361/688	Simons; Robert E.
US 4156458 A	USPAT	19790529		Flexible thermal connector for enhancing conduction cooling	165/81	165/185; 165/DIG.51; 257/682; 257/714; 257/718; 257/E23.094; 257/E23.098; 257/E23.103; 428/573; 428/596	Chu; Richard C. et al.
US 4050507 A	USPAT	19770927		Method for customizing nucleate boiling heat transfer from electronic units immersed in dielectric coolant	165/96	165/133; 165/911; 219/121.18; 219/121.23; 219/121.26; 219/121.69; 219/121.7; 219/121.71; 219/121.83; 219/121.85; 257/715; 257/E23.088; 62/527	Chu; Richard C. et al.
US 3993123 A	USPAT	19761123		Gas encapsulated cooling module	165/80.3	165/104.33; 165/80.4; 257/697; 257/714; 257/719; 257/720; 257/E23.094; 257/E23.095; 257/E23.098; 257/E23.11; 361/703	Chu; Richard C. et al.
US 3741292 A	USPAT	19730626		LIQUID ENCAPSULATED AIR COOLED MODULE	165/104.21	165/104.33; 257/715; 257/722; 257/724; 257/E23.088; 361/698	Aakalu; Nanda Kumar G. et al.

US 3586101 A	USPAT	19710622		COOLING SYSTEM FOR DATA PROCESSING EQUIPMENT	165/101	165/104.25; 174/15.1; 257/715; 257/722; 257/E23.088; 62/333	Chu; Richard C. et al.
US 3524497 A	USPAT	19700818		HEAT TRANSFER IN A LIQUID COOLING SYSTEM [TEXT AVAILABLE IN USOCR DATABASE]	165/80.4	165/104.33; 165/166; 165/185; 165/903; 174/15.1; 257/714; 257/E23.098; 361/699	CHU RICHARD C et al.
US 3512582 A	USPAT	19700519		IMMERSION COOLING SYSTEM FOR MODULARLY PACKAGED COMPONENTS [TEXT AVAILABLE IN USOCR DATABASE]	165/104.27	165/138; 165/76; 174/15.1; 257/715; 257/E23.088; 361/700	CHU RICHARD C et al.
US 3481393 A	USPAT	19691202		MODULAR COOLING SYSTEM [TEXT AVAILABLE IN USOCR DATABASE]	165/80.4	165/104.31; 165/104.33; 257/714; 257/E23.098; 361/699; 62/3.2	CHU RICHARD C
US 3328643 A	USPAT	19670627		Cooling device for electronic components [TEXT AVAILABLE IN USOCR DATABASE]	361/710	165/67; 165/80.3; 257/E23.086; 361/717	CHU RICHARD C et al.
US 3317798 A	USPAT	19670502		Cooling electrical apparatus [TEXT AVAILABLE IN USOCR DATABASE]	361/696	165/122; 165/80.3; 165/80.4; 361/701; 361/724; 361/796	CHU RICHARD C et al.
US 3247896 A	USPAT	19660426		Component heat removal device [TEXT AVAILABLE IN USOCR DATABASE]	165/80.3	165/185; 257/718; 257/722; 257/E23.086; 361/690	CHU RICHARD C et al.